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(74) Common Representative: **KONINKLIJKE PHILIPS
ELECTRONICS, N.V.**; c/o FRY, John, J. 595 Miner
Road, Cleveland, Ohio 44143 (US).

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(71) Applicant (for all designated States except US): **KONIN-
KLJKE PHILIPS ELECTRONICS, N.V.** [NL/NL];
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

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(71) Applicant (for AE only): **U.S. PHILIPS CORPORA-
TION** [US/US]; 1251 Avenue of the Americas, New York,
New York 10020 (US).

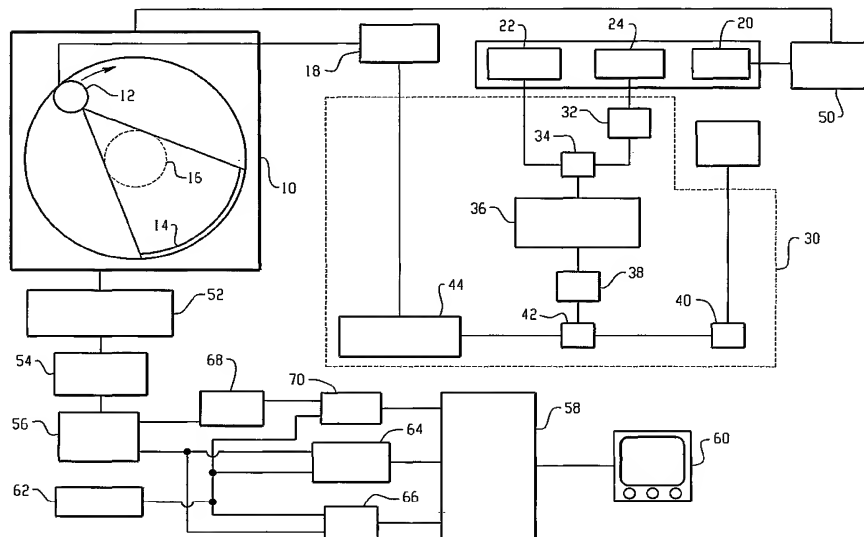
(72) Inventor; and

(75) Inventor/Applicant (for US only): **EVRON, Rami**
[IL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).

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(54) Title: AUTOMATIC DOSE ADAPTATION AS A FUNCTION OF PATIENT BODY MASS INDEX IN CT CALCIUM SCOR-
ING



(57) Abstract: A weight (22) and height (24) of a patient who is to undergo a calcium screening examination in an x-ray diagnostic scanner (10) is used to calculate an appropriate x-ray dose in terms of tube current (mAs) for the calcium screening examination in accordance with the formula: $mAs = c(BMI)^2$, where BMI is a patient's body mass index defined as: $BMI = \text{patient weight} / (\text{patient height})^2$ and C is a constant selected in accordance with a target required noise. In this manner, patients can be scanned with a minimum dose necessary to achieve the target noise, e.g., 20 HU. The images can be compared with earlier (and subsequent) images that have the same target noise.

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